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[54] **ROTATION CONTROL APPARATUS OPERATING WITH A SYNC SIGNAL HAVING VARIABLE INTERVALS**

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Related U.S. Application Data

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[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **369/47**

[58] **Field of Search** 369/47, 50, 60, 369/44.26, 54, 58, 48, 124

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[57] **ABSTRACT**

A rotation control apparatus which can maintain an accurate rotating state even in a high density optical disk (DVD) having a structure such that parts of the sync signal are recorded at an interval different from that of the other sync signal parts. The apparatus has: a unit period signal generator for generating a period signal of a unit period; a pre-pit detector for detecting a pre-pit from the DVD; a phase difference detector for detecting a phase difference between the detection timing of the pre-pit and the unit period signal; and a holding circuit for holding the phase difference detected. The rotation of the DVD is controlled on the basis of the phase difference held at the holding circuit.

4 Claims, 11 Drawing Sheets